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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/708,324

02/24/2004

Masahiko Fukuda

SIC-04-005

2323

29863 7590 04/06/2007
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EXAMINER

JOHNSON, VICKY A

ART UNIT

PAPER NUMBER

3682

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
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3 MONTHS

04/06/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/708,324 | Applicant(s) FUKUDA, MASAHIKO | |
| | Examiner Vicky A. Johnson | Art Unit 3682 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Romano (US 5,470,277).

Romano discloses a bicycle derailleur comprising: a base member (16) for attachment to a bicycle; a movable member (22) for supporting a chain guide (17); a first link member (20) pivotably coupled to the base member through a first link pin (25) and pivotably coupled to the movable member through a second link pin (23); a second link member (21) pivotably coupled to the base member through a third link pin (26) and pivotably coupled to the movable member through a fourth link pin (24); wherein the first link pin, the second link pin, the third link pin and the fourth link pin define edges of a phantom space (see Fig 4); wherein straight continuous phantom lines connecting ends of the first link pin, the second link pin, the third link pin and the fourth link pin in a non-crossing manner define remaining edges of the phantom space (see Fig 4); a motor (27) having a primary motor housing (see Fig 4) through which a drive shaft (29) exits and defines a drive shaft vector that points away from the primary motor housing (see Fig 4); wherein at least a part of the primary motor housing is disposed in the phantom

space (see Fig 4); and wherein the drive shaft vector points away from a plane containing the second link pin and the fourth link pin (see Fig 4).

Re claim 2, a relative angle between the drive shaft vector and a plane containing the second link pin and the fourth link pin is in a range between 45 degrees and 135 degrees when measured in a plane perpendicular to the first link pin, the second link pin, the third link pin and the fourth link pin (col. 4 lines 5-15).

Re claim 3, the drive shaft is coupled for moving the movable member through a gear connection (col. 4 lines 5-15).

Re claim 4, the gear connection comprises a gear reduction mechanism (col. 4 lines 5-15).

Re claim 5, at least a portion of the primary motor housing is disposed within the base member (see Fig 4).

Re claim 6, at least a portion of the drive shaft is disposed within the base member (see Fig 4).

Re claim 7, at least a portion of the primary motor housing is disposed within the base member, and wherein at least a portion of the drive shaft is disposed within the base member (see Fig 4).

Re claim 8, the drive shaft is coupled for moving the movable member through a gear connection (col.4 lines 5-15).

Re claim 9, the gear connection comprises a gear reduction mechanism (col. 4 lines 5-15).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Romano (US 5,470,277) in view of Fukada (US 6,162,140).

Romano discloses a derailleur as described above, but does not disclose the entire primary motor housing is disposed within the base member and the entire drive shaft is disposed within the base member.

Fukada teaches the use of the entire primary motor housing is disposed within the base member and the entire drive shaft is disposed within the base member (col. 2 lines 47-52).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Romano to include the entire primary motor housing and the entire drive shaft disposed within the base member as taught by Fukada in order to prevent the dirt and mud from interfering with the motor.

Re claim 11, Romano shows the drive shaft is coupled for moving the movable member through a gear connection (col. 4 lines 5-15).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


| | | |
|-----------|---------------|--------------|
| 6,047,230 | Spencer et al | (derailleur) |
| D452,664 | Terasawa | (derailleur) |
| 7,001,294 | Fukada | (derailleur) |
| 6,997,835 | Fukada | (derailleur) |
| 7,048,659 | Campagnolo | (derailleur) |
| 7,086,974 | Dal Pra | (derailleur) |

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vicky A. Johnson whose telephone number is (571) 272-7106. The examiner can normally be reached on Monday-Friday (7:00a-3:30p).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6217. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3682

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Vicky A. Johnson
Primary Examiner
Art Unit 3682
3/29/87